HIGH-DIELECTRIC CONSTANT METAL-INSULATOR METAL CAPACITOR IN VLSI MULTI-LEVEL METALLIZATION SYSTEMS Osamu S. NAKAGAWA HP Docket No.: 10005208-1 1/5

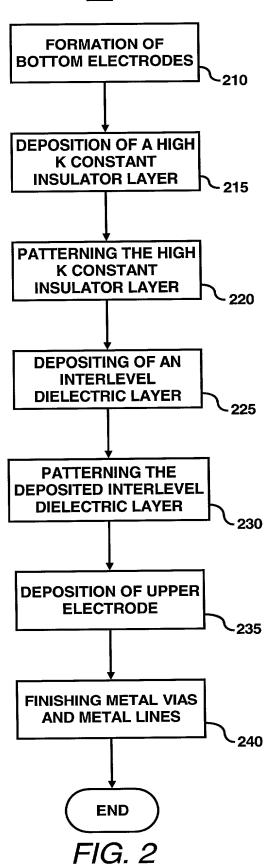
100 **UPPER ELECTRODE** 150 **VIA ARRAY** 140 **HIGH-K INSULATOR** LAYER 130 LOWER ELECTRODE 110 SIGNAL LINES 120

FIG. 1

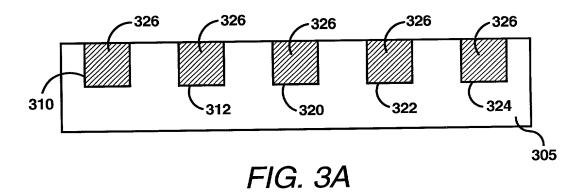
HIGH-DIELECTRIC CONSTANT METAL-INSULATOR METAL CAPACITOR IN VLSI MULTI-LEVEL METALLIZATION SYSTEMS OSAMU S. NAKAGAWA

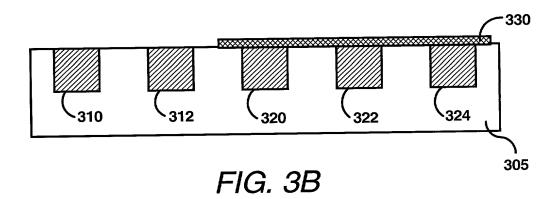
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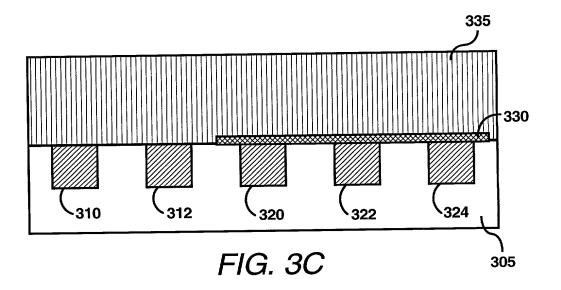
200



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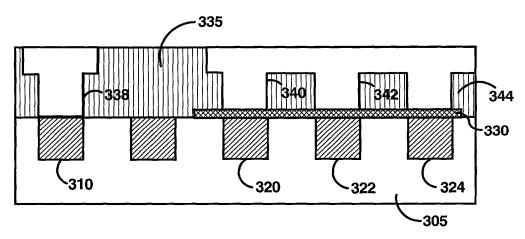


FIG. 3D

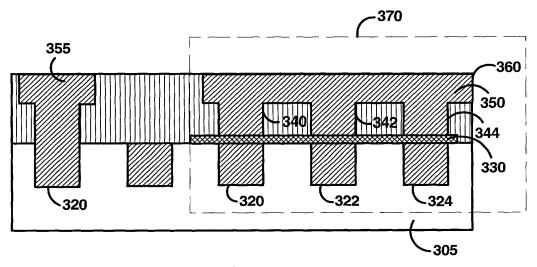


FIG. 3E

HIGH-DIELECTRIC CONSTANT METAL-INSULATOR METAL CAPACITOR IN VLSI MULTI-LEVEL METALLIZATION SYSTEMS Osamu S. NAKAGAWA

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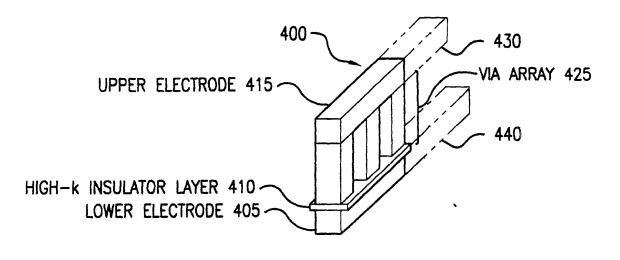


FIG.4

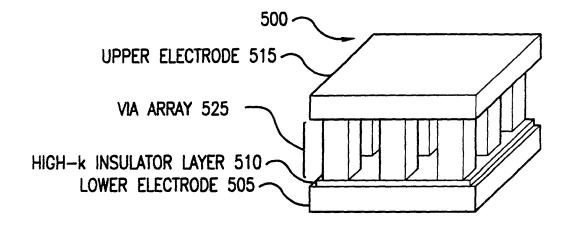


FIG.5 600 UPPER ELECTRODE 615 -**VIA 625** HIGH-k INSULATOR LAYER 610 LOWER ELECTRODE 605 -

FIG.6